

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Georg Fischer et al.
Serial No.: 10/735,159
Date Filed: December 12, 2003
Group Art Unit: 2831
Examiner: Ngo, Hung V.
Title: **CONTACTING COMPONENT**

MAIL STOP – APPEAL BRIEF - PATENTS
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REPLACEMENT APPEAL BRIEF

Further to the notice of appeal submitted on February 28, 2007 and the Notice of Panel Decision from Pre-Appeal Brief Review mailed March 23, 2007, Applicants hereby submit this appeal brief according to §41.37.

APPELLANT'S BRIEF (37 C.F.R. § 41.37)

This brief is submitted in support of appellants' notice of appeal from the decision dated February 15, 2007 of the Examiner finally rejecting Claims 2-4, 11, 13-16, 18 and 19 of the subject application.

I. REAL PARTY IN INTEREST

The real party in interest is:

Siemens AG
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GERMANY

by virtue of an assignment by the inventors as duly recorded in the Assignment Branch of the U.S. Patent and Trademark Office.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

The application as originally filed contained a total of 11 claims, and Claims 12-19 were added during prosecution. Claims 2, 11, 13, and 18 are independent. The status of the claims are as follows:

Claims Pending:	2-4, 11, 13-16, and 18-19
Claims Rejected:	2-4, 11, 13-16, and 18-19
Claims Allowed:	None
Claims Cancelled:	1, 5-10, 12 and 17
Claims Amended:	2-4, 11, 13-16, and 18-19
Claims Withdrawn:	None

Claims Objected: None

Appellants appeal the rejection of Claims 2-4, 11, 13-16, and 18-19 of the present application. These claims are reproduced in Appendix A.

IV. STATUS OF AMENDMENTS

Applicants cancelled Claims 5-10 in a Response to Election/Restriction filed with the U.S. Patent and Trademark Office (USPTO) on January 18, 2005. Applicants amended Claims 1 and 11 and added new Claim 12 in a Response to Office Action filed on May 6, 2005. Claims 1, 11, and 12 were amended and Claims 13-19 were added in a Response to Office Action filed October 26, 2005. Claims 2, 3, 4, 13, 14-16, 18 and 19 were further amended and Claims 1, 12 and 17 were cancelled in response to a Response to Final Office Action filed on March 9, 2006.

Upon receipt of an Advisory Action dated April 12, 2006, Applicants filed a Request for Continued Examination (RCE) on May 9, 2006. No further claim amendments submitted.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claim 2 is directed to a contacting component (reference character 1, *see* Spec. at [0028]) for manufacturing an electrical connection between a control/regulation device (*see* Spec. at [0013]) and an actuator (*see* Spec. at [0013]) wherein, among other things, a conductor device (reference character 2, *see* Spec. at [0029]) onto which a first plastic component (reference characters 3, 4, 5, and 6, *see* Spec. at [0028]) and, separately from it, a second plastic component (reference characters 3, 4, 5, and 6, *see* Spec. at [0028]) are molded, wherein the conductor device is bendable such that the first plastic component can engage the second plastic component to provide a single integral contacting component (*see* Spec. at [0011], [0013], and Figure 3), wherein the first plastic component and/or the second plastic component has a bending collar (reference character 8, *see* Spec. at [0030]) around which the conductor device can be bent.

Independent Claim 11 is directed to a contacting component (reference character 1, *see* Spec. at [0028]) for manufacturing an electrical connection between a control/regulation device (*see* Spec. at [0013]) and an actuator (*see* Spec. at [0013]) wherein, among other things, a conductor device (reference character 2, *see* Spec. at [0029]) onto which at least one first plastic component (reference characters 3, 4, 5, and 6, *see* Spec. at [0028]) and, separately from it, a second plastic component (reference characters 3, 4, 5, and 6, *see* Spec. at [0028]) are molded, said conductor device is bendable such that the first plastic component engages in the second plastic component to provide a single integral contacting component (*see* Spec. at [0011], [0013], and Figure 3), wherein the first plastic component and/or the second plastic component has a bending collar (reference character 8, *see* Spec. at [0030]) around which the conductor device can be bent, the first plastic component can engage in the second plastic component by means of a snap-in locking device (*see* Spec. at [0015] and [0030]), and the first plastic component in the engaged state has an angle of approximately 90° to the second plastic component.

Independent Claim 13 is directed to a contacting component (reference character 1, *see* Spec. at [0028]) for manufacturing an electrical connection wherein, among other things, a conductor (reference character 2, *see* Spec. at [0029]) onto which first and second plastic components (reference characters 3, 4, 5, and 6, *see* Spec. at [0028]) are molded, wherein the conductor is bendable such that the first plastic component can engage the second plastic component via a snap-in locking device (*see* Spec. at [0015] and [0030]) to provide a single integral contacting component (*see* Spec. at [0011], [0013], and Figure 3), wherein the first plastic component and/or the second plastic component has a bending collar (reference character 8, *see* Spec. at [0030]) around which the conductor device can be bent.

Independent Claim 18 is directed to a contacting component (reference character 1, *see* Spec. at [0028]) for manufacturing an electrical connection between a control/regulation device (*see* Spec. at [0013]) and an actuator (*see* Spec. at [0013]) wherein, among other things, a first plastic component (reference characters 3, 4, 5, and 6, *see* Spec. at [0028]) and a second plastic component (reference characters 3, 4, 5, and 6, *see* Spec. at [0028]) are molded separately onto the conductor device (reference character 2, *see* Spec. at [0029]), wherein the first plastic

component comprises a first section and a second section wherein the second section extends from the first section and has an angle of approximately 90° to the first section wherein the conductor device (reference character 2, *see* Spec. at [0029]) is bendable such that the first plastic component can engage the second plastic component to provide an integral contacting component (*see* Spec. at [0011], [0013], and Figure 3), wherein and said second section of said first plastic component receives said second plastic component, wherein the first plastic component and/or the second plastic component has a bending collar (reference character 8, *see* Spec. at [0030]) around which the conductor device can be bent.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 2-4, 11, 13-16, 18 and 19 stand rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,178,563 issued to Carl G. Reed ("Reed") in view of U.S. Patent 6,099,324 issued to Janssen et al. ("Janssen et al.").

VII. ARGUMENT

According to § 2143 of the Manual of Patent Examining Procedure, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

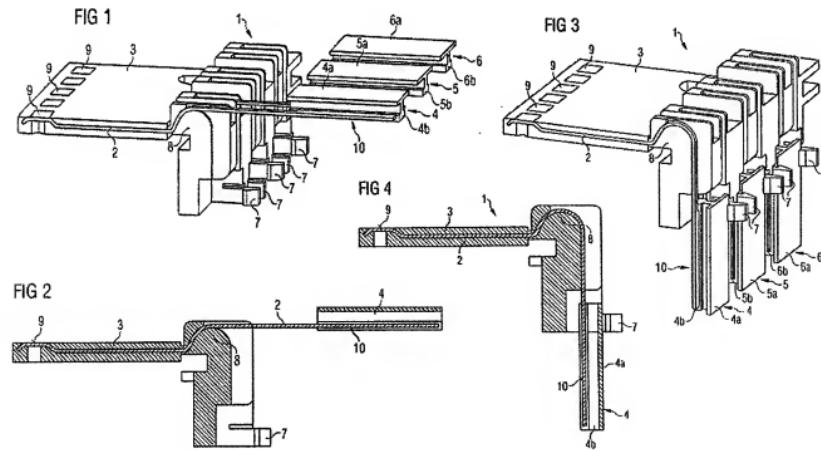
In the present case, a *prima facie* case of obviousness has not been established for two reasons: (1) both Reed and Janssen et al., individually and when combined, fail to teach or suggest a bending collar; and (2) there is no suggestion or motivation, either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the Reed device to have a bending collar or to combine the teachings of Reed and Janseen so that a combined device would have a bending collar.

First, both Reed and Janssen et al., individually and when combined, fail to teach or suggest a bending collar. Claims 2, 11, 13, and 18 recite "a bending collar around which the conductor device can be bent." According to the specification of the present application,

In Figures 3 and 4, the contacting component 1 is shown in the final assembled state. In order to reach this state, starting from Figure 1 or 2, each valve plug 4, 5, 6 is bent down-wards by approximately 90° by *bending around an integral bending collar 8* formed on the base component 3 so that the valve plugs 4, 5, 6, more precisely, the specific plate-shaped areas of the valve plugs engage with two latches 7 in each case that are also embodied integrally on the base component 3.

See Application at Paragraph 30. Figures 1 - 4 of the original specification of the present patent application are reproduced below.

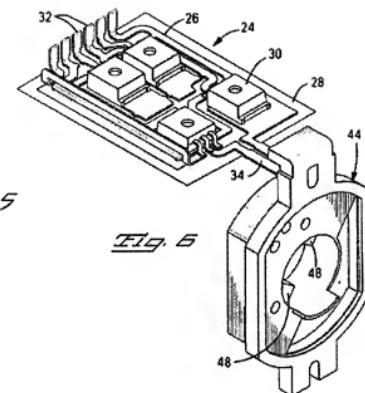


The bending collar 8 is clearly identified in each of the figures. Further, as the conductor device is reconfigured from its initial assembly state (Figures 1 and 2) to its final assembly state (Figures 3 and 4), the conductors are bent around bending collars 8. Thus, the application expressly teaches a bending collar 8 around which the conductor can be bent. Benefits of the bending collar are also disclosed.

Particularly favorably, the first and/or the second plastic component feature a bending collar around which the conductor device can be bent. As a result, additional tools or auxiliary means when engaging the two plastic components can be dispensed with. The conductor device is then bent automatically when assembling the contacting component. In addition, the bending process can then be automated cost-effectively.

See Application at Paragraph 14.

In the rejection, it is noted that Reed "does not disclose a bending collar." *See OA at 2.* But a premise of the rejection is that "Janssen et al disclose a bending collar being formed in a second component (44)(Fig 6) for supporting a conductor device (34)." *See OA at 2.* Figure 6 of Janssen et al. is reproduced below.



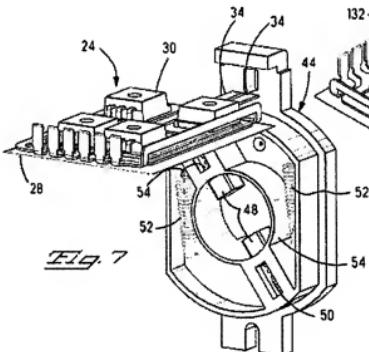
(Janssen et al., Figure 6).

This premise fails for two reasons. Regarding the first reason, the claims do not require that a component merely "supports" the conductor, as suggested in the rejection of the claims. Rather, the claims require "a bending collar around which the conductor device can be bent." The rejection fails to identify any structures in Janssen et al "around which the conductor device can be bent." As to the bending process, Janssen et al. merely states:

With reference now to FIGS. 6 and 7, the second contacts *have been bent through 90 degrees* such that the unit is ready to be installed upon the basic motor by, for example, the motor manufacturer.

See Janssen et al., 3:31-34 (emphasis added). While Janssen et al. teaches the conductors are bent, it says nothing about bending collars around which the conductors bend. Further, no such bending collars are illustrated in the figures. Regarding the second reason, Janssen et al. fails to teach any structures that "support" the conductor during the bending process, much less a structure "around which the conductor device can be bent." From Figure 6 of Janssen et al., it may appear that Janssen et al. teaches a shoulder on the second component (44) that "supports"

the conductor (34) *after the conductor (34) has been bent 90 degrees from its original straight configuration*. Figure 6 of Janssen et al. does not teach or suggest that the shoulder “supports” the conductor in any way during the bending process. Thus, Figure 6, by itself, does not teach or suggest “a bending collar around which the conductor device can be bent.” Further, Figure 7 of Janssen et al. conclusively illustrates that the shoulder of the second component (44) does not even “support” the conductor (34), even after the conductor (34) has been bent 90 degrees.



(Janssen et al., Figure 7). Figure 7 of Janssen et al. clearly shows that the conductor (34) enters the body of second component (44) at a point spaced above the shoulder so that it is not even in contact with the shoulder. Thus, because the shoulder of the second component (44) could not have “supported” the conductor (34) during or after the bending process, the shoulder certainly was not a structure “around which the conductor device [was] bent.” Thus, the invention as claimed in Claims 2, 11, 13, and 18 is patentable in view of the Reed and Janssen et al. because neither reference teaches or suggests a bending collar. Similarly, the invention as claimed in Claims 3, 4, 14-16 and 19 is patentable for the same reasons.

Second, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the Reed device to have a bending collar or to combine the teachings of Reed and Janseen so that a combined device would have a bending collar. This is particularly the case, because Reed teaches away from the invention and if Reed were modified to have a bending collar, it would be unsatisfactory for its intended purpose. Reed expressly teaches that the two insulators are rotated relative to each other to bend the central portions 42 of the contacts 28 (see Reed, Figure 5).

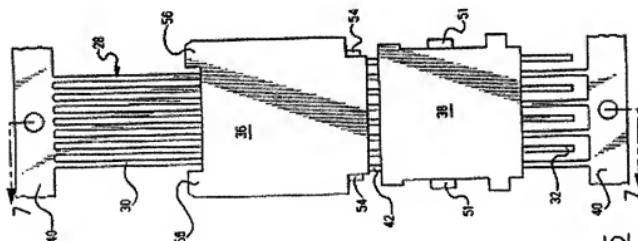


Figure 5

(Reed, Figure 5).

The first insulator 36 is rotated with respect to the second insulator 38 about a hinge axis defined by the central portions 42. This causes the central portions 42 to bend and to pull away from the external surface 44. During at least part of this bending operation the follower surface 52 rides along the arcuate bearing surface 48, thereby facilitating precisely repeatable bending of the central portions 42. As this bending operation nears completion, the latches 54 move into the region between the flanges 50 (see FIG. 12). Once the insulators 36, 38 have been moved to a position in which they are substantially transverse to each other, the latches 54 emerge below the flanges 50, thereby latching the first and second insulators 36, 38 at the desired 90° angle with respect to one another.

(Reed, 4:18-32) (emphasis added).

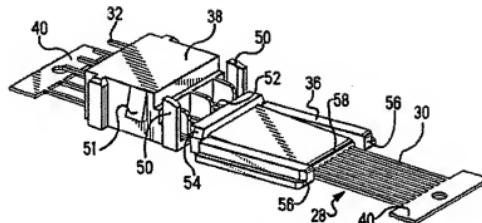


Figure 12

(Reed, Figure 12). Rather than using a bending collar as taught by the present invention, Reed teaches away from a bending collar by teaching that repeatable bending is facilitated by riding the follower surface 52 along the arcuate bearing surface 48. (See Reed, Figure 7).

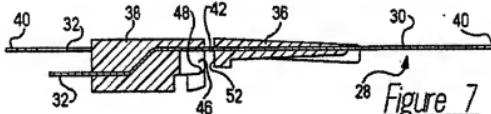


Figure 7

(Reed, Figure 7). No bending collars are in contact with the central portions 42 of the contacts 28. Further, if a bending collar were added to the Reed device, it would no longer function as intended. Reed teaches, "the bent central portions 42 provide a holding force that opposes the latches 54 and provides a stable assembly." (Reed, 4:39-41). As noted above, as the follower surface 52 rides along the arcuate bearing surface 48, the central portions 42 "pull away from the external surface 44." (See Figure 6). As the central portions 42 of the contacts 28 resist this pulling away from the external surface 44, they provide the holding force that opposes the latches 54. If the central portions 42 of the contacts 28 are not pulled away from the external surface 44, there is no holding force to oppose the latches 54. If the Reed device is modified to have bending collars, the central portions 42 of the contacts 28 would not be able to "pull away"

and therefore would not be able to provide the "holding force" to provide a stable assembly. Because Janssen et al. merely teaches bending the contacts, without the use of bending collars or a bearing/follower structure, Janssen et al. provides no teaching that would allow the Reed device to have bending collars and still provide the holding force.

Therefore, a *prima facie* case of obviousness has not been established because: (1) both Reed and Janssen et al., individually and when combined, fail to teach or suggest a bending collar; and (2) there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the Reed device to have a bending collar or to combine the teachings of Reed and Janseen so that a combined device would have a bending collar.

SUMMARY

Applicants believe that the prior art cited do not render the independent claims obvious. Applicants respectfully submit that the dependent Claims are allowable at least to the extent of the independent Claim to which they refer, respectively. Thus, Applicants respectfully request reconsideration and allowance of the dependent Claims.

Applicants believe there are no fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTT S L.L.P. (31625)

Date: 7/5/07

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VIII. CLAIMS APPENDIX

Claims:

1. (Cancelled)

2. (Previously Presented) A contacting component for manufacturing an electrical connection between a control/regulation device and an actuator, said component comprising:

a conductor device onto which a first plastic component and, separately from it, a second plastic component are molded, wherein the conductor device is bendable such that the first plastic component can engage the second plastic component to provide a single integral contacting component, wherein the first plastic component and/or the second plastic component has a bending collar around which the conductor device can be bent.

3. (Previously Presented) The contacting component according to claim 2, wherein the first plastic component can engage in the second plastic component by means of a snap-in locking device.

4. (Previously Presented) The contacting component according to claim 2, wherein the first plastic component in the engaged state has an angle of approximately 90° to the second plastic component.

5-10. (Cancelled)

11. (Previously Presented) A contacting component for manufacturing an electrical connection between a control/regulation device and an actuator, said component comprising:

a conductor device onto which at least one first plastic component and, separately from it, a second plastic component are molded, said conductor device is bendable such that the first plastic component engages in the second plastic component to provide a single integral contacting component, wherein the first plastic component and/or the second plastic component has a bending collar around which the conductor device can be bent, the first plastic component can engage in the second plastic component by means of a snap-in locking device, and the first plastic component in the engaged state has an angle of approximately 90° to the second plastic component.

12. (Cancelled)

13. (Previously Presented) A contacting component for manufacturing an electrical connection, said component comprising:

a conductor onto which first and second plastic components are molded, wherein the conductor is bendable such that the first plastic component can engage the second plastic component via a snap-in locking device to provide a single integral contacting component, wherein the first plastic component and/or the second plastic component has a bending collar around which the conductor device can be bent.

14. (Previously Presented) The contacting component according to claim 13, wherein the first plastic component in the engaged state has an angle of approximately 90° to the second plastic component.

15. (Previously Presented) The contacting component according to claim 13, wherein the first plastic component comprises a first section and a second section wherein the second section extends from the first section and has an angle of approximately 90° to the first section and said second section receives said second plastic component.

16. (Previously Presented) The contacting component according to claim 2, wherein the first plastic component comprises a first section and a second section wherein the second section extends from the first section and has an angle of approximately 90° to the first section and said second section receives said second plastic component.

17. (Cancelled)

18. (Previously Presented) A contacting component for manufacturing an electrical connection between a control/regulation device and an actuator, said component comprising:

a conductor device onto which a first plastic component and, separately from it, a second plastic component are molded, wherein the first plastic component comprises a first section and a second section wherein the second section extends from the first section and has an angle of approximately 90° to the first section wherein the conductor device is bendable such that the first plastic component can engage the second plastic component to provide an integral contacting component, wherein and said second section of said first plastic component receives said second plastic component, wherein the first plastic component and/or the second plastic component has a bending collar around which the conductor device can be bent.

19. (Previously Presented) The contacting component according to claim 18, wherein the first plastic component can engage in the second plastic component by means of a snap-in locking device.

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IX. EVIDENCE APPENDIX

NONE

X. RELATED PROCEEDINGS APPENDIX

NONE